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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/649,461  
Filing Date: August 25, 2000  
Appellant(s): ALLISON ET AL.

**MAILED**  
APR 19 2005  
**Technology Center 2600**

Gregory A. Hunt  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/31/05.

**(1)     *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2)     *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3)     *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4)     *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5)     *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6)     *Issues***

The appellant's statement of the issues in the brief is correct.

**(7)     *Grouping of Claims***

The rejection of claims 1-36,39-49,53-69 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8)     *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

6,622,016	Sladek	09-2003
6,505,046	Baker	01-2003
DE 19805261	Jung	
EP 710043A1	Brown	

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2-4,7,8,12-17,20,21,25-27,32,34-36,39,40,45-49,55-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Sladek [US 6,622,016].

Regarding claim 1,14,26,34,45,57, Sladek discloses a method and system for controlled provisioning of telecommunication services. Sladek further discloses a method comprising:

- receiving a plurality of call signaling messages received at a telecommunication network element (128 in Fig.3).
- screening at the telecommunication network element, the call signaling messages exchanged between a home location register (HLR) and a visitor location register (VLR)

that relate to changes in location of mobile subscribers; See summary of invention and col. 13, line 54 – col. 6, line 30, col. 14, line 57- col. 15, line 5;

- correlating the screened mobile call signaling messages based on atleast one parameter in the mobile call signaling message to identify mobile call signaling messages in a dialogue between the HLR and VLR and that relates to change in location of a particular mobile subscriber; see summary of invention and col. 13, line 54 – col. 6, line 30, col. 14, line 57- col. 15, line 5;
- generating a location change and sent to SMSC which further generates an SMS message and send it to the subscriber. See column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10.

See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claim 2-4,15-17,55,56, Sladek further discloses a method of receiving plurality of call signaling messages including receiving a mobile application part (MAP) update location request message. See col. 13, line 54 – col. 15, line 33.

Regarding claims 7,20, Sladek further discloses the message parameters to include mobile directory number (MDN). See col. 13, lines 34-53.

Regarding claims 8,21 Sladek further discloses the message parameters to include international mobile station identity directory (IMSI). See col. 13, lines 34-53.

Regarding claims 12, Sladek further discloses the SMS message to be either an information message or a welcome message. See col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58 and col. 5, lines 12-31.

Regarding claims 13,25,27, Sladek further discloses a method of correlating the screened mobile call signaling messages based on a dialogue ID (such as registration) in the mobile call signaling messages. See summary of invention, col. 14, line 11 – col. 15, line 33, col. 16, lines 1-39.

Regarding claim 32, Sladek discloses a method wherein the change in location of the subscriber is generated and sent to SMSC. See column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10. See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claims 35,36,46,47 Sladek further discloses the telecommunications network element to comprise of a signal transfer point / signaling gateway routing node (128 in Fig.3).

Regarding claims 39,48, Sladek discloses the telecommunications network element to comprise of visitor location register (VLR). See Fig. 3

Regarding claims 40,49, Sladek discloses the telecommunications network element to comprise of home location register (HLR). See Fig. 3.

Regarding claims 58 and 59, Sladek further discloses message-processing platform that is adapted to send the change in location indication message to a short message service center/presence server. See column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10. See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claims 60-63, Sladek further teaches the method of call routing from a signal transfer point to appropriate destination based on call signaling messages. See Fig. 3, column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10. See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claims 64-69, Sladek further discloses a method of receiving plurality of call signaling messages including receiving a mobile application part (MAP) update location request message. See col. 13, line 54 – col. 15, line 33.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5,6,9,11,18,19,22,24,41-44,53,54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek [US 6,622,016] in view of Baker [US 6,505,046].

Regarding claims 5,6,18,19, Sladek does not disclose the message parameters to include HLR/VLR identification.

Baker further discloses HLR identification and VLR identification as one of the message parameters used to generate the change in location indication message. See column 8, lines 11-25.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sladek with the above teaching from Baker in order to route the messages accurately to the proper destination terminal.

Regarding claims 9,22 Baker further discloses the message parameters to include mobile the MSCID. See column 8, lines 11-25.

Regarding claims 11,24 Baker further discloses the SMS message to be either an information message or a welcome message. See column 8, lines 30-36, lines 61-65.

Regarding claim 41, Baker further discloses that owners of the subscriber's HLR and the first network element are not the same. See Fig.3 and column 6, lines 1-61.

Regarding claims 42,43,53,54 Baker further discloses message-processing platform contained within the first network element WSN. See column 6, lines 1-61 and Fig.3

Regarding claim 44, Baker further discloses message-processing platform WSN associated with the first network element that is adapted to correlate and examine the parameters of the mobile call signaling message and generate a notification to the subscriber by means of SMS. See Fig.3 and column 6, line 1- column 7, line 50, column 8, lines 11-42.

5. Claims 10,23,28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek [US 6,622,016] in view of Jung [DE 198 05 261 A].

Regarding claims 10 and 23, Sladek does not disclose the date and time as one of the message parameters. See pages 3 and 6.  
Jung teaches the use of date and time as one of the message parameters. See pages 3 and 6.  
Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sladek with the above teaching from Jung in order to ensure an accurate up-to-date location information is maintained on mobile stations.

Regarding claim 28, Jung further discloses a method to determine if the subscriber is in a foreign network based on HLRID and VLRID. See abstract.

Regarding claims 29 and 30, Jung further discloses a method where the correlation process for the mobile call signaling messages continues when subscriber roams in a foreign network and further the correlation process is stopped when the subscriber is not roaming in the foreign network. See pages 3-6.

Regarding claim 31, Jung further discloses a method of:

- (a) determining whether a mobile call location update record is active; see page 6.
- (b) in response to determining that a mobile call location update record is active for the message, storing the message in the mobile call location update record; see page 6.
- (c) in response to determining that a mobile call location update record is not active for the message, creating a new mobile call location update record and storing the message therein. see page 6.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek [US 6,622,016] in view of Brown [EP 710 043 A1].

Sladek as treated in claim 26, does not disclose a method where the location update record is discarded after failing to produce call signaling messages to complete update location record in a given time.

Brown discloses a method where the location update message is sent periodically within a pre-determined amount of time. See page 7, lines 27-34.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sladek with the above teaching from Brown in order to ensure up-to-date location information is maintained on mobile stations.

### *Response to Arguments*

Appellant's arguments with respect to claims 1-36,39-49,53-69 have been fully considered but they are not persuasive.

(A) Rejections of claims 1,2-4,7,8,12-17,20,21,25-27,32,34-36,39,40,45-49 and 55-69 under 35 USC 102(b) as anticipated by Sladek

i. Arguments for independent claim 1

The appellant mainly argues the following features of the invention in the arguments for independent claim 1 in pages 16-30:

- Screening and correlating at a network element call signaling messages between HLR and VLR
- Sending a change in location indication to SMSC
- Generating and sending SMS message automatically to the subscriber in response to a change in location of the subscriber

In response to the arguments, the examiner would like to draw the appellant's attention to the Sladek reference.

Sladek discloses a telecommunication network comprising of key elements HLR, MSC, VLR. See fig. 2. Further, Sladek discloses that the VLR is part of the MSC or the two can be separate entities. See col. 14, lines 28-30. Further, Sladek reference teaches that there exists message signaling between HLR and VLR. See col. 15, lines 6-50, where the user profile which includes user's location is first notified to the HLR which then sends a response to the serving system which comprises of the MSC and/or VLR and the updated user's profile is then stored in the VLR. Therefore the network element MSC in the serving system is screening and correlating the signaling messages between HLR and VLR

Further, Sladek reference teaches a method for sending and receiving messages. See col. 16, lines 26-29. Sladek also teaches the use of MSC. Therefore, MSC is being read as SMSC. Sladek further discloses a method of sending REGNOT message to the serving system (for example SMSC) where REGNOT message is a message indicating the change in subscriber's location. See col. 15, lines 6-40.

Sladek teaches a method of generating and sending SMS messages to the subscriber. See col. 16, lines 26-29. Sladek discloses a method wherein when the subscriber first turns on, the system sends a registration notification to HLR. See col. 14, line 57 – col. 15, line 1. The REGNOT message serves to identify the location of the subscriber. In response to REGNOT message the subscriber's HLR will send a regnot response message to the serving system/SMSC which then stores the updated subscriber profile including the location of the subscriber in the VLR. Once the location of the subscriber is known, an SMS message is automatically sent to the subscriber at the indicated location. See col. 15, lines 6-40.

ii. Arguments for dependent claims 2,4-7,8,12,13,60 and 64

The appellant argues that the Sladek reference does not teach a method of screening and correlating at a network element call signaling messages between HLR and VLR relating to a change in location of a mobile subscriber.

In response to the arguments, the examiner would like to draw the appellant's attention to the Sladek reference.

Sladek discloses a telecommunication network comprising of key elements HLR, MSC, VLR. See fig.2. Further, Sladek discloses that the VLR is part of the MSC or the two can be separate entities. See col. 14, lines 28-30. Further, Sladek reference teaches that there exists message signaling between HLR and VLR. See col. 15, lines 6-50, where the user profile which includes user's location is first notified to the HLR which then sends a response to the serving system which comprises of the MSC and/or VLR and the updated user's profile is then stored in the VLR. Therefore the network element MSC in the serving system is screening and correlating the signaling messages between HLR and VLR relating to a change in location of a mobile subscriber.

iii. Arguments for independent claim 14

The features of this independent claim 14 are similar to independent claim 1 and hence the response to arguments for claim 1 applies to these arguments as well. See Arguments for independent claim 1.

iv. Arguments for dependent claims 15-25,61 and 65

The features of the claims are similar to claims 2,4-7,8,12,13,60 and 64 and hence the response to arguments for claims 2,4-7,8,12,13,60 and 64 applies to these arguments as well. See Arguments for dependent claims 2,4-7,8,12,13,60 and 64.

v. Arguments for independent claim 26

The features of this independent claim 26 are similar to independent claim 1 and hence the response to arguments for claim 1 applies to these arguments as well. See Arguments for independent claim 1.

vi. Arguments for dependent claims 27,32,62,66

The features of the claims are similar to claims 2,4-7,8,12,13,60 and 64 and hence the response to arguments for claims 2,4-7,8,12,13,60 and 64 applies to these arguments as well. See Arguments for dependent claims 2,4-7,8,12,13,60 and 64.

vii. Arguments for independent claim 34

The features of this independent claim 34 are similar to independent claim 1 and hence the response to arguments for claim 1 applies to these arguments as well. See Arguments for independent claim 1.

viii. Arguments for dependent claims 35,36,39,44 and 67

The features of the claims are similar to claims 2,4-7,8,12,13,60 and 64 and hence the response to arguments for claims 2,4-7,8,12,13,60 and 64 applies to these arguments as well. See Arguments for dependent claims 2,4-7,8,12,13,60 and 64.

ix. Arguments for independent claim 45

The features of this independent claim 45 are similar to independent claim 1 and hence the response to arguments for claim 1 applies to these arguments as well. See Arguments for independent claim 1.

x. Arguments for dependent claims 46-49,55,56 and 68

The features of the claims are similar to claims 2,4-7,8,12,13,60 and 64 and hence the response to arguments for claims 2,4-7,8,12,13,60 and 64 applies to these arguments as well. See Arguments for dependent claims 2,4-7,8,12,13,60 and 64.

xi. Arguments for independent claim 57

The features of the independent claim 57 are similar to independent claim 1 and hence the response to arguments for claim 1 applies to these arguments as well. See Arguments for independent claim 1.

xii. Arguments for dependent claims 58,59,63 and 69

The features of the claims are similar to independent claim 1 and hence the response to arguments for claim 1 applies to these arguments as well. See Arguments for independent claim 1.

B. Rejections of claims 5,6,9,11,18,19,22,24,41-44,53 and 54 under 35 USC 103(a) as unpatentable over Sladek in view of Baker

The claims depend from claims 1,14 and 45 and hence the response to arguments for claims 1,14 and 45 applies to these arguments as well. See Arguments for independent claim 1,14 and 45.

C. Rejections of claims 10,23 and 28-31 under 35 USC 103(a) as unpatentable over Sladek in view of Jung

The claims depend from claims 1,14 and 26 and hence the response to arguments for claims 1,14 and 26 applies to these arguments as well. See Arguments for independent claim 1,14 and 26.

D. Rejections of claim 33 under 35 USC 103(a) as unpatentable over Sladek in view of Brown

The claim depend from claim 26 and hence the response to arguments for claim 26 applies to these arguments as well. See Arguments for independent 26.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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*M*  
SS

April 6, 2005

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